

IN THE CLAIMS

The entire set of current claims is provided for the Examiner's convenience.

Kindly amend claims 1, 5, 8, 11, 12, 14-16, 20, 23, 26, 27, 29, 30, 31, 35, 38, 41-48, 50 and 51 as follows:

1. (amended) A mounting interface for providing a steadfast relationship between a motor and a baseplate, the mounting interface comprising at least three surface points forming a single plane acting as a common boundary between the motor and the baseplate, positions of the at least three surface points being selected to affect a vibrational characteristic of the motor.

2. The mounting interface of claim 1 wherein the at least three surface points further comprise pads.

3. The mounting interface of claim 1 wherein the at least three surface points are coupled to the baseplate.

4. The mounting interface of claim 1 wherein the motor includes a mount flange, wherein the at least three surface points are coupled to the mount flange.

5. (amended) The mounting interface of claim 1 wherein the motor includes a mount flange and wherein the at least three surface points provide reduced contact area between the mount flange and the baseplate, the reduced contact area lowering [the] rigidity of the mount flange and [the] lowering resonant frequencies.

6. The mounting interface of claim 1 wherein the at least three surface points have a surface area, the surface area being chosen to reduce acoustical noise.

7. The mounting interface of claim 1 wherein the at least three surface points are formed using a predetermined material, the predetermined material being chosen to reduce acoustical noise.

8. (amended) The mounting interface of claim 1 wherein the at least three surface points are positioned at predetermined radial angles therebetween, the predetermined radial angles being chosen to reduce acoustical noise.

9. The mounting interface of claim 1 further comprising a damping ring disposed on an inner side and between the at least three surface points for dissipating distortion energy.

10. The mounting interface of claim 9 wherein the motor includes a mount flange and wherein the damping ring is coupled to the mount flange.

11. (amended) The mounting interface of claim 10 wherein the damping ring further comprises a [vertical] portion disposed perpendicular to the single plane on an outer surface of the at least three surface points of the mounting interface, the [vertical] portion engaging with the baseplate to dissipate energy resulting from sheer distortion between the baseplate and the at least three surface points.

12. The mounting interface of claim 11 wherein the damping ring further comprises a seal disposed on the [vertical] portion on [an] the outer surface of the at least three surface points of the mounting interface, the seal forming a barrier in a gap between the mount flange and the baseplate.

13. The mounting interface of claim 9 wherein the damping ring is coupled to the baseplate.

14. (amended) The mounting interface of claim 13 wherein the damping ring further comprises a [vertical] portion disposed perpendicular to the single plane on an outer surface of the at least three surface points of the mounting interface, the [vertical] portion engaging with the baseplate and the at least three surface points to dissipate energy resulting from sheer distortion between the baseplate and the at least three surface points.

15. (amended) The mounting interface of claim 14 wherein the damping ring further comprises a seal disposed on the [vertical] portion on [an] the outer surface of

the at least three surface points of the mounting interface, the seal forming a barrier in a gap between the motor and the baseplate.

16. (amended) A data storage system, comprising:
a storage medium;
an actuator including a transducer disposed at a distal end of an actuator arm;
an actuator motor, coupled to the actuator, for moving the transducer relative to the storage medium;

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a baseplate;
a spindle motor for rotating the storage medium;
a mount flange, coupled to the spindle motor, for coupling the spindle motor to the baseplate; and

a mounting interface disposed between the mount flange and the baseplate, the mounting interface comprising at least three surface points forming a single plane acting as a common boundary between the mount flange and the baseplate, positions of the at least three surface points being selected to affect a vibrational characteristic of the spindle motor.

17. The data storage system of claim 16 wherein the at least three surface points further comprise pads.

18. The data storage system of claim 16 wherein the at least three surface points are coupled to the baseplate.

19. The data storage system of claim 16 wherein the at least three surface points are coupled to the mount flange.

20. (amended) The data storage system of claim 16 wherein the at least three surface points provide reduced contact area between the mount flange and the baseplate, the reduced contact area lowering [the] rigidity of the mount flange and [the] lowering resonant frequencies.

21. The data storage system of claim 16 wherein the at least three surface points have a surface area, the surface area being chosen to reduce acoustical noise.

22. The data storage system of claim 16 wherein the at least three surface points are formed using a predetermined material, the predetermined material being chosen to reduce acoustical noise.

23. (amended) The data storage system of claim 16 wherein the at least three surface points are positioned at predetermined radial angles therebetween, the predetermined radial angles being chosen to reduce acoustical noise.

24. The data storage system of claim 16 further comprising a damping ring disposed on an inner side and between the at least three surface points for dissipating distortion energy.

25. The data storage system of claim 24 wherein the damping ring is coupled to the mount flange.

26. (amended) The data storage system of claim 25 wherein the damping ring further comprises a [vertical] portion disposed perpendicular to the single plane on an outer surface of the at least three surface points of the mounting interface, the [vertical] portion engaging with the baseplate to dissipate energy resulting from sheer distortion between the baseplate and the at least three surface points.

27. (amended) The data storage system of claim 26 wherein the damping ring further comprises a seal disposed on the [vertical] portion on [an] the outer surface of the at least three surface points of the mounting interface, the seal forming a barrier in a gap between the mount flange and the baseplate.

28. The data storage system of claim 24 wherein the damping ring is coupled to the baseplate.

29. (amended) The data storage system of claim 28 wherein the damping ring further comprises a [vertical] portion disposed perpendicular to the single plane on an outer surface of the at least three surface points of the mounting interface, the [vertical] portion engaging with the baseplate and the at least three surface points to

dissipate energy resulting from sheer distortion between the baseplate and the at least three surface points.

30. (amended) The data storage system of claim 29 wherein the damping ring further comprises a seal disposed on the [vertical] portion on [an] the outer surface of the at least three surface points of the mounting interface, the seal forming a barrier in a gap between the motor and the baseplate.

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31. (amended) A method for reducing acoustic dynamics of a spindle motor, comprising forming a mounting interface between a spindle motor and a baseplate, the mounting interface comprising at least three surface points forming a single plane acting as a common boundary between the spindle motor and the baseplate, positions of the at least three surface points being selected to affect a vibrational characteristic of the motor.

32. The method of claim 31 wherein the forming a mounting interface between a spindle motor and a baseplate further comprises forming the mounting interface on the baseplate.

33. The method of claim 31 wherein the forming a mounting interface between a spindle motor and a baseplate further comprises forming the mounting interface on a mount flange and coupling the mount flange to the spindle motor.

34. The method of claim 31 wherein the forming a mounting interface further comprises forming at least three surface pads.

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35. (amended) The method of claim 31 wherein the forming a mounting interface further comprises reducing the contact area between [the] a mount flange of the spindle motor and the baseplate, the reduced contact area lowering [the] resonant frequencies.

36. The method of claim 31 wherein the forming a mounting interface further comprises forming at least three surface points having a surface area, the surface area being chosen to reduce acoustical noise.

37. The method of claim 31 wherein the forming a mounting interface further comprises forming at least three surface points using a predetermined material, the predetermined material being chosen to reduce acoustical noise.

38. (amended) The method of claim 31 wherein the forming a mounting interface further comprises forming at least three surface points with a predetermined radial angle between each of the at least three surface points, the predetermined radial angles being chosen to reduce acoustical noise.

39. The method of claim 31 further comprising forming a damping ring on an inner side and between the at least three surface points for dissipating distortion energy.

40. The method of claim 39 wherein the forming a mounting interface between a spindle motor and a baseplate further comprises forming the mounting interface on a mount flange and wherein the damping ring is coupled to the mount flange.

41. (amended) The method of claim 40 wherein the forming of the damping ring further comprises forming a [vertical] portion perpendicular to the single plane on an outer surface of the at least three surface points of the mounting interface, the [vertical] portion engaging with the baseplate to dissipate energy resulting from sheer distortion between the baseplate and the at least three surface points.

42. (amended) The [mounting interface] method of claim 41 wherein the forming of the damping ring further comprises forming a seal on the [vertical] portion at [an] the outer surface of the at least three surface points of the mounting interface, the seal forming a barrier in a gap between the mount flange and the baseplate.

43. (amended) The [mounting interface] method of claim 39 wherein the damping ring is coupled to the baseplate.

44. (amended) The [mounting interface] method of claim 43 wherein the forming of the damping ring further comprises forming a [vertical] portion perpendicular

to the single plane on an outer surface of the at least three surface points of the mounting interface, the [vertical] portion engaging with the baseplate and the at least three surface points to dissipate energy resulting from sheer distortion between the baseplate and the at least three surface points.

45. (amended) The [mounting interface] method of claim 44 wherein the forming of the damping ring further comprises forming a seal on the [vertical] portion at [an] the outer surface of the at least three surface points of the mounting interface, the seal forming a barrier in a gap between the motor and the baseplate.

46. (amended) A mounting interface for providing a steadfast relationship between a motor and a baseplate, the mounting interface comprising a damping ring disposed on an inner side and between at least three surface points, the damping ring dissipating distortion energy, positions of the at least three surface points being selected so as to affect a vibrational characteristic of the motor.

47. (amended) The mounting interface of claim 46 wherein the damping ring further comprises a [vertical] portion disposed on an outer surface of the at least three surface points of the mounting interface, the [vertical] portion engaging with the baseplate to dissipate energy resulting from sheer distortion between the baseplate and the at least three surface points.

48. (amended) The mounting interface of claim 47 wherein the damping ring further comprises a seal disposed on the [vertical] portion on [an] the outer surface of the at least three surface points of the mounting interface, the seal forming a barrier in a gap between the mount flange and the baseplate.

49. The mounting interface of claim 46 wherein the damping ring is coupled to the baseplate.

50. (amended) The mounting interface of claim 49 wherein the damping ring further comprises a [vertical] portion disposed on an outer surface of the at least three surface points of the mounting interface, the [vertical] portion engaging with the